INDEX TO VOLUME IX.

A.

Academy of Natural Sciences, Philadelphia, proceedings of, 152, 310, 458.
Acid, boracic, in lagoons of Tuscany, 431.
——, ——, influence in vitrification, 305.
——, butyric, in fruits of the soap tree, 116.
——, nitric, action on woody fibre, 20.
——, nitrous, estimation of, 114.
——, pectic, 21, 23.
——, *Porter's* new, resembling pectic, 23.
——, preparation of hydro-bromic and hydriodic, 421.
——, separation of butyric, valerianic and acetic, 419.
—— Springs, analyses of water of, 123.
——, succinic, preparation of, from malate of lime, 117.
Adams, C. B., contributions to Conchology, 133.
Agassiz, L., Lake Superior, noticed, 309, 455.
——, on the relations between animals and the elements in which they live, 369.
Aleurodes abutilonea, 108.
—— corni, 109.
Alkaline springs, 123.
Allain and *Bartenbach*, on the extraction of gold from the copper ores of Chessy and Sain-Bel, 297.
Alumina, nitrate of, 33.
——, separation of, from phosphoric acid, 283.
Ambystoma macrodactyla, A. mavortia, A. episcopus, 138.
American Academy of Arts and Sciences, memoirs of, 311.
—— Almanac, 1850, noticed, 151.
—— Association for the Advancement of Science, Charleston meeting of, 453.
—— —— —— ——, proceedings of, 453.
—— Philosophical Society, proceedings of, 152, 458.
—— prime meridian, 184.
—— diseases, *Drake's* work on, 456.
Amitus aleurodinus, 110.
——, a new genus of insects, 109.
Ammonia, amount of, in the atmosphere, 115.
Ammonias, on compound, by *A. Wurtz*, 281.
Analogy, Kirkwood's, in the periods of planets, 395.
Analyses of the ash of potatoes, oats and hay, 20.
Analysis of a calculus from the bladder of a whale, 118.
—— of Lancasterite, 216.
—— of manganese spar, 410.
—— of Mannite, 285.
—— of Danburite, 286.
—— of several minerals, 83.
—— of Mineral springs in Canada, 266.
—— of Oak Orchard acid spring water, Alabama, Genesee Co., N. Y., 449.
Analysis of Schorlomite, 429.
—— of Schuylkill water, by *M. H. Boyé*, 123.
—— of Vermiculite, 422.
Anemometry, contributions to, 146.
Aneroid barometer, examined by *Lovering*, 249.
Animals, the relation between them and the elements in which they live, 369.
Anisole and salicylic ether, by *A. Cahours*, 279.
Annual of Scientific Discovery, by *Geo. Bliss, Jr.*, and *David A. Wells*, 309, 454.
Arsenic in the deposit from mineral waters, 418.
Association, American, for the Advancement of Science, Charleston meeting of, 453.
——, ——, ——, proceedings of, 454.
Astræa, a genus of zoophytes, *J. D. Dana*, 295.
Astronomical Journal, by *B. A. Gould*, 151, 309.
Atlas, physical, of natural phenomena, *Johnston's*, 454.
Atomic volume of minerals, 220.
—— weight of silica, by *H. Kopp*, 284.
—— —— of Barium, 176.
—— —— of Ruthenium, 422.
—— weights, table of, by *J. D. Dana*, 217.
Augite, isomorphism of, with miargyrite, 429.
Aurora Borealis, cause of, 450.
Australia, denudation in, 289.

B.

Bailey, J. W., on Navicula Spencerii, 23.
Bain, Alex., discovery of the electricity of a plate of zinc buried in the earth, 1.
Baird, Spencer F., description of new reptiles, 137, 309.
——, editor of the Iconographic Encyclopedia, 151.
Barium, strontium, calcium and magnesium, relations of, 176.
Barlow, W. H., cause of diurnal variation of the magnetic needle, 445.
Barometer, aneroid, 249.
Bartenbach and *Allain*, on the extraction of gold from the copper ores of Chessy and Sain-Bel, 297.
Bartram, memorials of, 85.
Belemnite, structure of, 438.
Belemnoteuthis, 438.
Benzamid, on sulphuretted, by *A. Cahours*, 278.
Benzoate of lime, the products of dry distillation of, 276.
Benzoic series, researches on, by *G. Chancel*, 275.
Benzole, *C. B. Mansfield*, 283.
Berkeley, M. G., Mycology of North America, 171.
Biogen, on the so-called liquid, 399.

Birds, fossil, of New Zealand, 147.
Blake, E. W., on laws of motion in reference to expansion of elastic fluids, 334.
Bliss, Geo., Jr., Annual of Scientific Facts, 454.
Blowpipe characters of Pyrrhite, 423.
Blunt, model of the moon's surface, 143.
Boston Journal of Natural History, 312.
Bowditch, H. J., infusoria on the teeth, 442.
Boyé, M. H., analysis of Schuylkill water, 123.
Brain, size of, in various races of men, 246.
Brewer, Wm. H., analysis of Hudsonite, 228.
British fossil mammals, 149.
Brodie, B. C., researches on wax, 111.
Bromine, new mode of testing, 114.
Brush, Geo. J., density of Danburite, 286.
Buff, on the development of electricity by muscular contraction, 304.
Besanez, von Gorup, on butyric acid in fruits of soap tree, 116.
Butter, Shea, composition of, 116.
Buttyrone, action of nitric acid on, 278.

C.

Cabinet of Geology and Mineralogy for sale, 147.
Cabot, J. E., narrative of tour to Lake Superior, 455.
Caffeine, action of potash on, 419.
Cahours, A., on anisole, and salicylic ether, 279.
——, on sulphuretted benzamid, 278.
——, on the composition of chloropicrine, 278.
Calculus, analysis of, from the bladder of a whale, 118.
Canada, *Logan's* Report on, 12.
——, mineral waters of, 266.
Carex lupuliformis, 29.
—— torta, 30.
Caricography, *C. Dewey*, 29.
Chancel, G., on the benzoic series, 275.
—— and *Laurent*, action of nitric acid on butyrone, 278.
——, on the products of dry distillation of benzoate of lime, 276.
Chemical equivalents, 368.
—— notation, 364.
Chermes Castaneæ, 108.
Chimpanzée, cranial capacity of, 39.
Chinese vegetable tallow, 116.
Chloroform, varieties of, 115.
Chloropicrine, on the composition of, by *A. Cahours*, 278.
Chondrodite, composition of, 85.
Chrome, nitrate of, 33.
Clemandot and *Maes*, on the influence of boracic acid in vitrification, 305.
Colors, classification of, by *J. D. Forbes*, 300.
Colthurst, scale of heights by, 455.
Comet, new, 442.
—— of 1556, expected return of, 442.
Conchology, contributions to, *C. B. Adams*, 133.
Corenwinder, B., new mode of preparing nitrogen, 114.
Coryceæus, eyes of, *J. D. Dana*, 133.
Copper amalgam, 282.
—— ores, extraction of gold from, 297.
Cost of voltaic arrangements, 111.
Crania of the human race, comparative capacity, 40.
—— of Troglodytes gorilla, 34.
Craw, Wm. J., analysis of Oak Orchard spring water, 449.
Crossley, R., analysis of Vermiculite, 423.
Crustacea of the American Exploring Expedition, 129, 133, 295.
Crystalline bodies, deportment of, between the poles of a magnet, 414.
Curtis, M. A., Mycology of North America, 171.

D.

Dana, J. D., Crustacea of the American Exploring Expedition, 129.
——, on Danburite, 286.
——, degradation of rocks and formation of valleys, 289.
——, denudation in the Pacific, 48.
——, eyes of Sapphirina, 133.
——, on Orchestidæ, 295.
——, on the genus Astræa, 295.
——, historical account of the eruptions in Hawaii, 347.
——, on isomorphism and atomic volume of minerals, 220.
——, on minerals investigated by *Hermann*, 408.
——, note on heteronomic isomorphism, 407.
——, on the Ozarkite of Shepard, 430.
——, Report on zoophytes, noticed, 294.
——, table of atomic weights, 217.
Danburite, 286.
Darlington, Wm., memorials of Bartram and Marshall, 85.
Davis, Chas. H., proposals for American prime meridian criticised, 196.
Daubrée, M. A., artificial production of minerals, 120.
Denudation in the Pacific, 48.
De La Rive, A., on the cause of the aurora borealis, 450.
De La Rue, Warren, on the Navicula Spencerii, 23.
Desains, P., on rotation of the plane of polarization by magnetism, 344.
Desor, M., memoir of, on biogen, criticised, 399.
Dewey, Chester, Caricography, 29.
Diamond, large, in the possession of the Nizam, 434.
Dinornis, remains of, 437.
Drake, D., treatise on American diseases, noticed, 456.
Dykes of trap, in New Hampshire, *O. P. Hubbard*, 158.

E.

Ehrenberg, on infusoria from Oregon, 140.
Electricity of a buried plate of zinc, 1.
——, development of, by muscular contraction, 304.
Elephant, fossil, 256.
Elliot, Samuel, gold on his farm, 126.
Endlicher, Generum Plantarum, 148.
——, Synopsis Coniferarum, 148.
Engé-ena, crania of, 34.
——, zoological position of, 41.
Engineer Bureaus, 147.
Entophytes, *J. Leidy* on, 441.

Equivalents, chemical, of Gerhardt and Laurent, 364.
Erni, H., analysis of Danburite, 286.
——, analysis of Lancasterite, 216.
——, analysis of Oak Orchard spring water, 449.
Erosion measured by trap dikes in New Hampshire, 158.
Eryx maculatus, a new reptile, 137.
Ethers, phosphoric, researches on, 113.
Ether, salicylic, 279.
Eye, on the gradual production of luminous impressions on, 443.
Expansion of elastic fluids, how influenced by laws of motion, 334.
Expedition, American Exploring, crustacea of, 129, 133, 295.
——, —— ——, geological report of, cited, 48.
——, —— ——, Report on races of man, 307.
——, —— ——, Report on zoophytes, by *J. D. Dana*, 294.

F.

Fisher, Wm., analysis of minerals, 83.
Fluids, elastic expansion of, 334.
Fluorine in Firth of Forth, &c., 118.
Folger, Walter, memoir of, 313.
Footmarks, *I. Lea*, on reptilian, 124.
Forbes, J. D, on the classification of colors, 300.
Forchhammer, on fluorine in sea-water, 120.
Formulary, universal, *Griffith's*, 457.
Fossil bones in Vermont, 206.
—— cetacea, 207.
—— mammals, (British) history of, 149.
—— Mastodon angustidens, 304.
—— nut in the eocene, 127.
Foster's geological chart, 151, 309.
—— —— ——, *Mather's* disavowal of, 444.
Fresenius, on the amount of ammonia in the atmosphere, 115.

G.

Gardens, zoological, noticed, 304.
Garnet, composition of, 84.
Gay, Martin, obituary notice of, 305.
Geological chart, (*Foster's*), 151, 309.
—— ——, ——, disavowed by *Mather*, 444.
—— Society's Journal, 312.
Geology of Canada, 12.
Gerhardt, on the chemical equivalents and notation of *Laurent* and himself, 364.
Gibbon, J. H., on meteorite from North Carolina, 143.
Gibbsite, 408.
Girard, Chas., on the so-called biogen liquid, 399, 458.
Gold of California, 126.
——, extraction of, from the copper ores of Chessy and Sain-Bel, 297.
——, Montgomery Co., Maryland, 126.
Gould, B. A., Astronomical Journal by, 151, 309, 458.
Gray, Alonzo, elements of Natural Philosophy, 308.
Gray, Asa, notice of Darlington's memorials, 85.
——, notice of Endlicher, 148.
Greensand, composition of, 83.
Griffith, R. E., Universal Formulary of, noticed, 457.

H.

Haldeman, S. S., on new species of Hemiptera, 108.
Hallowell, Edwd., on Eryx maculatus, 137.
Harris, J., on Primeval Man, 456.
Hawaii, account of the eruptions of, 347.
Hay, analysis of the ash, 20.
Hayes, A. A., blowpipe characters of Pyrrhite, 423.
——, on red zinc ore of New Jersey, 424.
Heat, rotation of plane of polarization by magnetism, 344.
Heck, G., Iconographic Encyclopedia, notice of, 141, 309.
Heights, *Miss Colthurst's* scale of, 456.
Hemiptera, new species of, 108.
Hermann, on Pennite, a new mineral, 217.
——, notice of minerals, 408.
Hildreth, meteorological journal kept at Marietta, 264.
Hooker, J. D., description of the table land of Thibet, 298.
Horsford, E. N., on the relations of Barium, &c., 176.
Hough, F. B., mineral localities in northern N. Y., 288, 424.
——, on sulphuret of nickel, 287.
Hubbard, O. P., on erosion in New Hampshire, 158.
Hudsonite, analysis of, 228.
Hunt, E. B., on the interpretation of Mariotte's law, 412.
Hunt, T. S., chemical examination of mineral waters from Canada, 266.
——, constitution of leucine, 63.
——, on the Geology of Canada, 12.
——, notice of Chancel's researches, 276.
Hydrogen gas, passage of, through solid bodies, 421.
Hymenoptera, new species of, 108.

I.

Iconographic Encyclopedia by *G. Heck*, 151, 309.
Infusorial deposits in Oregon, 140.
Infusoria on the teeth, 442.
Instruments, self-registration of magnetical and meteorological, 319.
Intonation, perfect musical, 68, 199.
Iodine, new mode of detecting, 114.
Iron, nitrates of, 30.
Isomorphism of miargyrite and augite, 429.
—— of minerals, *J. D. Dana*, 220, 407.

J.

Jackson, C. T., description of Vermiculite, 422.
Johnson, Saml. W., observations on sulphuret of nickel, 287.
Johnston's, A. K., Physical Atlas, 454.

K.

Keller, Wm., analysis of a calculus from the bladder of a whale, 118.
Kirkwood, D., on a new analogy in the periods of planets, 395.
Knoblauch, H., on the deportment of crystalline bodies between the poles of a magnet, 414.
Kopp, H., on the atomic weight of silica, 284.

L.

Lagoons of Tuscany, 431.
Lake Superior, *Agassiz's*, noticed, 309, 455.
Lancasterite, a new mineral, 216.
Lassaigne, J. L., on arsenic in mineral waters, 418.
Laurent and *Chancel*, action of nitric acid on butyrone, 278.
——, chemical equivalents and notation of, 364.
Laws of Mariotte, *E. B. Hunt* on, 412.
—— of motion in elastic fluids, 343.
Lee, I., on reptilian footmarks, 124.
Lefroy, Capt. J. H., on self-registration of instruments by photography, 319, 444.
Leidy, J., on entophytes, 441.
——, on fossil Tapir, 140.
Lepolite, 411.
Leucine, constitution of, 63.
Liebig, J., on the preparation of succinic acid from malate of lime, 117.
——, separation of butyric, valerianic, and acetic acid, 419.
Lindsayite, 411.
Locke, John, on the phantascope, 153.
Logan, W. E., reports on the geology of Canada, 12.
Loomis, E., on the electricity of a plate of zinc buried in the earth, 1.
Lovering, on Melloni's researches, 152.
——, on the American prime meridian, 184.
——, on the aneroid barometer, 249.
Louyet, M., passage of hydrogen gas through solid bodies, 421.
Lyman, C. S., on the gold of California, 126.

M.

Maes and *Clemandot*, on the influence of boracic acid in vitrification, 305.
Magnetic needle, cause of diurnal variations of, 445.
Magnetical instruments, self-registration of, 319, 444
Magnetism, causing rotation of the plane of polarization of heat, 344.
Malaguti, Durocher, and *Sarseau*, on silver, &c., in sea-water, 421.
Malate of lime, preparation of succinic acid from, 117.
Mansfield, C. B., on benzole, 283.
Man Primeval, work on, noticed, 456.
——, races of, 307.
——, size of brain in, 246.
Manatus nasutus, (Ne-hoo-le,) 45.
——, senegalensis, 47,
Manganese spar, 410.
Mannite, extraction of, by *Smith*, analysis by *Stenhouse*, 285.
Mantell, G. A., on Dinornis, 437.
——, on structure of the belemnite and belemnoteuthis, 438.
——, on pelorosaurus, 147, 439.
Mantell, R. N., on the strata and organic remains in the Great Western railway cutting, 436.
Mantell, W. B. D., fossil birds of New Zealand, 147.
——, on remains of the Dinornis, 437.
Mariotte's law, interpretation of, 412.
Marshall, memorials of, 85.
Mastodon angustidens, 304.
Melsens, M., new process for extracting sugar from the sugar-cane, 301.
Memoir of Walter Folger, 313.
Memorials of Bartram and Marshall, 85.
Metals, silver, lead and copper in sea-water, 421.
Meteorite in North Carolina, 143.
Meteorological instruments, self-registration of, 319, 444.
—— journal kept at Marietta, 264.
Mève, E. H., on preparation of hydrobromic and hydriodic acids, 421.
Mialhé, on varieties of chloroform, 115.
Miargyrite, isomorphous with augite, 429.
Micrometric measurements by the microscope, 27.
Minerals, artificial production of, 120.
—— associated with emery, *Smith*, 289.
—— investigated by *Hermann*, 408.
——, isomorphism and atomic volume of, 220.
——, localities of, in N. Y., 288, 424.
——, Chondrodite, 85; Danburite, 286; Garnet, 84; Gibbsite, 408; Greensand, 83; Hudsonite, analysis of, 228; Lancasterite, a new species, 216; Lepolite, 411; Lindsayite, 411; Manganese spar, 410; Ozarkite, 430; Pyrrhite, 423; Red zinc ore, 424; Rhodonite, 410; Schorlomite, 429; Sphene, 430; Troostite, 409; Vivianite, 84; Willemite, 408.
Mitchell, Wm., memoir of Walter Folger, of Nantucket, 313
Moon's surface, model of, 143.
Morton, S. G., measurements of human crania, 40.
——, size of the human brain, 246.
Motion, laws of, influencing the expansion of elastic fluids, 334.
Muscular contraction, development of electricity by, 304.
Musical intonation, perfect, 68, 199.
Mycology of N. America, *Berkley* and *Curtis*, 171.

N.

Natural Philosophy, Gray's elements of, 308.
Naviculæ Spencerii, 23.
Nebulæ observed with Rosse's telescope, 140.
Nepenthes, composition of the fluid in the ascidia of, 419.
New Hampshire, trap dikes in, evidence of erosion, 158.
New Holland, on denudation in, 289.
Ne-hoo-le or Manatus nasutus, 45.
Nickel, sulphuret of, in Northern New York, 287.
Nineveh, ruins of, 447.
Nitrates of Iron, &c., 30.
——, basic of iron, 32.
Nitrogen, new mode of preparing, 114.
Noberts' micrometer, 27.
Norwood, reports on the geology of Wisconsin, 306.
Notation, chemical, *Gerhardt* and *Laurent*, 364.
Nut, fossil, in the eocene, 127.

O.

Oak Orchard spring water, analysis of, 449.
Oats, analysis of the ash, 20.

Obituary of *Martin Gay*, 305.
Orchestidæ, 295.
Ordway, John M., on nitrates of iron, &c., 30.
Organ, for perfect intonation, 68, 199.
Organic bases, production of, 420,
Owen, D. D., Geological report of Wisconsin, 306.
Owen, Richard, British fossil mammals, 149.
Oxygen from chlorate of potassium, 419.
Ozarkite, 430.

P.

Pacific, denudation in, 48.
Page, Chas. G., on Trevelyan's bars vibrating by galvanism, 105.
Pelorosaurus, 439.
Pennite, a new mineral, 217.
Perkins, G. H., on Engé-ena, 45.
Pettenkofer, on a copper amalgam, 282.
Phantascope, *Locke's*, 153.
Phillips, on anemometry, 146.
Phosphoric acid, separation of, from alumina, 283,
Phosphoric ethers, *Vögeli's*, 113.
Photography, *Lefroy's* application of, to self-registration of instruments, 319, 444.
Pickering, Chas., on races of man, 307.
Piddington, H., on a large diamond, 434.
Pinus, 149.
Planets, analogy of the periods of, 365.
Plestiodon anthracinus, 139.
Ploiaria maculata, 108.
Poole, H. W., on perfect musical intonation, 68, 199.
Porter, John A., action of nitric acid on woody fibre, 20.
——, ash analysis by, 20.
Potatoes, analysis of the ash, 20.
Prime meridian, 184.
Provostaye, De La, on rotation of the plane of polarization of heat by magnetism, 344.
Pseudotriton montanus, 139.
Pyrrhite, blowpipe characters of, 423.

R.

Rammelsberg, analysis of schorlomite, 429.
Ray Society, anniversary of, noticed, 304.
Registration of instruments by photography, *Lefroy*, 319, 444.
Relations between animals and the elements in which they live, 369.
Report, geological, of Wisconsin, by *D. D. Owen*, 306.
——, American Association, proceedings of, 453.
—— of the United States Exploring Expedition on Races of man, 307.
—— —— —— ——, on Zoophytes, 294.
Reptile, discovery of a large fossil, 147, 439.
——, new species of, *S. F. Baird*, 137, 309.
Reynose, M. A., new mode of detecting bromine and iodine, 114.
Rhodonite, 410.
Rocks, degradation of, 289.
Rogers, Wm. B., on acid and alkaline springs, 123.
Rose, H., on the separation of phosphoric acid from alumina, 283.
Rotation, *Kirkwood's* analogy of, in the periods of planets, 365.
Royal Society, anniversary of, 304.
Ruffin, Edward, fossil nut in the eocene, 127.
Ruins of Nineveh, 447.
Ruthenium, atomic volume of, 422.

S.

Sacc, Prof., on the functions of pectic acid, 20.
Salamanders, four new species of, 137.
Salicylic ether, 279.
Sapinus, new genus of pines, 148.
Sapphirina, eyes of, 133.
Schizopod crustacea, *J. D. Dana*, 129.
Schlieper, Adolphe, analysis of manganese spar, 410.
Schorlomite, analysis of, 429.
Schunck, Edward, use of tin plate scrap in the manufacture of iron, 279.
Schwarz, H., estimation of nitrous acid, 114.
Scink, new species of, 137.
Shea butter, composition of, 116.
Silica, atomic weight of, 284.
Silliman, B., Jr., analysis of Schuylkill water, 123.
——, description of Lancasterite, 216.
Silver, reduction of the chlorid of, 418.
Skinner, F. S., the plough, the loom, and the anvil, noticed, 309.
Smith, J. L., minerals associated with emery, 289.
Smith, Messrs., extraction of mannite from the dandelion, 285.
Smithsonian contributions, 312.
Soap tree, butyric acid in fruits of, 116.
Society of Arts, transactions of, 457.
——, Ray, anniversary of, noticed, 304.
——, Royal, of London, anniversary of, noticed, 304.
Soubeiran, on varieties of chloroform, 115.
Spencer, J. A., travels in Holy Land, noticed, 456.
Sphene, large crystals of, by *Vaux*, 430.
Stenhouse, J., analysis of mannite, 285.
——, production of organic bases from vegetable substances, 420.
Stoastoma, genus of shells, *Adams*, 133.
Sugar, new mode of extracting from sugar cane, 301.
Swan, Wm, on gradual production of luminous impressions on the eye, 443.
Synopsis Coniferarum, 148.

T.

Table of atomic weights, *J. D. Dana*, 217.
Tallow, Chinese vegetable, 116.
Tapir, fossil, American, *Leidy*, 140.
Thibet, description of the table land of, 298.
Thomson, R. D., on Shea butter and vegetable tallow, 116.
Thompson, Zadock, fossil bones in Vermont, 256.
Tindall, John, on the deportment of crystalline bodies between the poles of a magnet, 414.
Tin plate scrap, use of, in the manufacture of malleable iron, 279.
Titaniferous veins of the Alps, origin of, 122.
Transactions of the Royal Society of Edinburgh, 312.
Trevelyan's bars vibrating by galvanism, 105.
Troglodytes gorilla, crania of, 34.

Troostite, 409.
Tuscany, boracic acid, lagoons of, 431.

V.

Valleys, formation of, 289.
Vanuxem's cabinet for sale, 147.
Vaux, Wm. S., large crystals of sphene, 430.
Veins, titaniferous, in the Alps, 122.
Vermiculite, analysis of, 422.
Vibration of Trevelyan's bars, 105.
Vitrification, influence of boracic acid in, 305.
Vivianite, composition of, 84.
Voelcker, M., on the chemical composition of the fluid in the ascidia of Nepenthes, 419.
Vögeli, F., on phosphoric ethers, 113.
Volcanoes, historical account of the eruptions of Hawaii, 347.
Voltaic arrangements, cost of, 111.

W.

Wales, New South, rocks and valleys of, 289.
Ward, on the cost of voltaic arrangements, 111.
Water, analysis of mineral spring water from Canada, 266.
——, —— of Oak Orchard spring, 449.
——, alkaline springs, 123.
——, containing boracic acid, 431.
Water, analysis of Schuylkill, 123.
—— of Firth of Forth, fluorine in, 118.
Wax, researches on, by *B. C. Brodie*, 111.
Welles, David A., annual of scientific discovery, 309, 454.
Whale, analysis of a calculus from the bladder of, 118.
Willemite, 408.
Wilson, G., on fluorine in sea-water, 118.
Wisconsin, geological report of, 306.
Wittstein, M., on the reduction of chlorid of silver, 418.
Wood, E. T., on Shea butter and vegetable tallow, 116.
Woody fibre, action of nitric acid on, 20.
Wurtz, A., action of potash on caffeine, 419.
——, on compound ammonias, 281.
——, researches on leucine, criticised, 63.
Wyman, J., on Engé-ena or Troglodytes gorilla, 34.
——, on Ne-hoo-le, or Manatus nasutus, 45.
——, notice of Owen's contributions, 149.

Z.

Zinc, electricity of, when buried in the earth, 1.
Zinc, red ore of, 424.
Zoological Gardens, London, noticed, 304.
Zoophytes, Dana's Report on, 294.